

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/651,424		08/30/2000	Mariusz H. Jakubowski	MS1-528US	2561
22801	7590	02/07/2006		EXAMINER	
LEE & HA	-	· =	TRAN, TONGOC		
421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201				ART UNIT	PAPER NUMBER
•				2134	
				DATE MAILED: 02/07/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
•						
Office Action Summary	09/651,424	JAKUBOWSKI ET AL.				
omoc Action Gammary	Examiner	Art Unit				
The MAILING DATE of this communication and	Tongoc Tran	2134				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA: - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was realized to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	1. sely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 11 O						
,						
, 	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-9 and 11-36 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) 1-9 and 11-36 is/are rejected.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	r election requirement.					
o/ are easyest to rectine and a	. ••					
Application Papers						
9)☐ The specification is objected to by the Examine						
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list	of the certified copies not receive	.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 	Paper No(s)/Mail Do	ate Patent Application (PTO-152)				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	,, , , ,				

DETAILED ACTION

1. In view of the Appeal Brief filed on October 11, 2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 4, 8, 11, 12, 18, 19, 20, 35 and 36 are rejected under 35

U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In respect to claims 1, 3, 4, 8, 11, 12, 18, 19, 20, 35 and 36, it is unclear what the terms "a portion", "another portion", "other portion", "the portion", "a segment", "another segment", "the other segment", "the segment" are in referencing to. Examiner has contacted Applicant's Attorney by phone on January 20, 2006 to clarify the meanings of the terms. Thus, the terms are interpreted as explained to the Examiner as follow for examination:

Page 3

"the portion" is referencing "a portion", "the segment" is referencing "a segment", "the other portion" is referencing "another portion", "another segment" is referencing "the other segment".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 16-21, 24, 25, 29, 31 and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Yuval (U.S. Patent No. 5,956,405).

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

In respect to claim 1, Yuval discloses one or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more processors, causes the one or more processors to perform acts including:

selecting a portion of a digital good; selecting another portion of the digital good, wherein the other portion is to be encrypted; and using the portion as a substitution box (S-box) when encrypting the other portion (see col. 14, lines 5-19, a portion of digital good-selecting a block of application code; another portion of the digital good-performing a cipher operation on a first set of bits).

In respect to claim 2, Yuval discloses one or more computer readable-media as recited in claim 1, wherein the entire digital good is to be encrypted (see col. 5, line 60-col. 6, line 12, Fig. 3, item 310).

In respect to claim 3, Yuval discloses one or more computer readable media as recited in claim 1, wherein the using comprises determining, for each group of bits of the other portion, a new group of bits based on the portion (see col. 14, lines 5-19).

Application/Control Number: 09/651,424

Art Unit: 2134

In respect to claim 4, Yuval discloses one or more computer readable media as recited in claim .1, wherein the using comprises using bits of the portion to determine a substitution sub-portion for each sub-portion in the other portion (see col. 14, lines 5-19).

Page 5

In respect to claim 5, Yuval discloses one or more computer readable media as recited in claim 4, wherein the sub-portion comprises a byte (see Fig. 2B).

In respect to claim 6, Yuval discloses one or more computer readable media as recited in claim 1, wherein the digital good comprises a software program (see col. 14, lines 5-19).

In respect to claim 16, Yuval discloses one or more computer-readable memories comprising computer-readable instructions that, when executed by a processor, direct a computer system to perform the method as recited in claim 8 (see col. 14, lines 5-19).

In respect to claim 17, Yuval discloses the method comprising:

using at least a portion of a digital good as a substitution box (S box) (see col.

14, lines 5-19).

In respect to claim 18, Yuval discloses the method as recited in claim 17, wherein the using comprises using the portion of the digital good as a substitution box to encrypt another portion of the digital good (see col. 14, lines 5-19)

In respect to claim 19, Yuval discloses the method as recited in claim 18, wherein the using comprises determining, for each group of bits of the other portion, a new group of bits based on the portion (see col. 14, lines 5-18 and 27-28).

In respect to claim 20, Yuval discloses the method as recited in claim 18, wherein the using comprises using a bit pattern of the portion to determine a substitution value for each value in the other portion (see col. 14, lines 5-19).

In respect to claim 21, Yuval discloses the method as recited in claim 17, wherein the digital good comprises a software program (see col. 14, 5-19, application code).

In respect to claim 24, Yuval discloses one or more computer-readable memories comprising computer-readable instructions that, when executed by a processor, direct a computer system to perform the method as recited in claim 17 (col. 16, lines 50-64).

In respect to claims 25-29, the claimed limitations are system claims that are substantially similar to method claims 1-4 and 6. Therefore, claims 25-29 are rejected based on the similar rationale.

In respect to claim 31, Yuval discloses a client-server system, comprising: a production server to use a portion of a first digital good as a substitution box (S-box) in encrypting at least a portion of a second digital good to produce a protected digital good; and a client to store and execute the protected digital good, the client being configured to evaluate the protected digital good to determine whether the protected digital good has been tampered with (see col. 14, lines 5-19 and col. 5, line 60-col. 6, line 12, Fig. 3, items 308).

In respect to claim 32, Yuval discloses the client-server system as recited in claim 31, wherein the first digital good and the second digital good are the same digital good (see col. 15, lines 44-57).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(c) which forms the basis for all obviousness rejections set forth in this Office action:

Applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as *** at the time this invention was made, or was subject to a joint research agreement at the time this invention was made. However, reference *** additionally qualifies as prior art under another subsection of 35 U.S.C. 102, and therefore, is not disqualified as prior art under 35 U.S.C. 103(c).

Application/Control Number: 09/651,424 Page 8

Art Unit: 2134

Applicant may overcome the applied art either by a showing under 37 CFR 1.132 that the invention disclosed therein was derived from the invention of this application, and is therefore, not the invention "by another," or by antedating the applied art under 37 CFR 1.131.

Claims 7, 8, 9, 11-15, 22, 23, 30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuval (U.S. Patent No. 5,956,405) in view of Nohda (U.S. Patent No. 6,215,875).

In respect to claim 7, Yuval discloses one or more computer readable media as recited in claim 1. Yuval does not disclose but Nohda discloses wherein the digital good includes video content (see Nohda, col. 1, lines 11-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to encipher digital information such as video with Yuval's teaching of enciphering application code for the benefit of providing variety of security services for different multimedia communication products.

In respect to claim 8, Yuval and Nohda disclose the method as recited in claim 8, wherein the encryption process uses a Data Encryption Standard (DES) cipher (see Nohda, col. 1, lines 27-36).

In respect to claim 9, Yuval and Nohda disclose the method as recited in claim. 8, wherein the entire digital good is to be encrypted by the encryption process (see Yuval, col. 5, line 60-col. 6, line 12, Fig. 3, item 310).

In respect to claim 11, Yuval and Nohda disclose the method as recited in claim 8, wherein the mapping comprises determining, for each group of bits of the other segment, a new group of bits based on the segment (see Yuval, col. 14, lines 5-18 and 27-28).

In respect to claim 12, Yuval and Nohda disclose the method as recited in claim 8, wherein the mapping comprises using bits of the segment to determine a new value for each value in the other segment (see Yuval, col. 14, lines 5-19).

In respect to claim 13, Yuval discloses the method as recited in claim 8, wherein the digital good comprises a software program (see Yuval, col. 14, lines 5-19, application code).

In respect to claims 14, 15, 22, 23, 30 and 34, Yuval and Nohda disclose a method and system claims that are substantially similar computer readable claims 7 and 8. Therefore, claims 14, 15, 22, 23, 30 and 34 are rejected based on the similar rationale.

4. Claims 33-36 are rejected under 35 U.S.C. 103(c) as being unpatentable over Yuval (U.S. Patent No. 5,956,405).

In respect to claim 33, Yuval discloses one or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more processors, causes the one or more processors to perform acts including:

Yuval does not explicitly discloses decrypting at least a portion of a digital good by using another portion of the digital good as substitution box (S-box). Yuval discloses this in the encryption process but does not explicitly discloses the decryption process. However, inverse s-box used in encryption and decryption is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of inverse s-box in the decryption of the data block taught by Yuval to decrypt the digital good from the original s-box.

In respect to claim 35, Yuval discloses one or more computer readable media as recited in claim 33. Yuval does not disclose wherein the decrypting comprises using bits of the other portion to determine a substitution value for each value in the portion. Yuval discloses this in the encryption process but does not explicitly discloses the decryption process. However, inverse s-box used in encryption and decryption is old and well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of inverse s-box in the decryption of the data block taught by Yuval to decrypt the digital good from the original s-box.

Application/Control Number: 09/651,424

Art Unit: 2134

In respect to claim 36, Yuval discloses one or more computer readable media as recited in claim 33, wherein the digital good includes one or more of: a software program, audio content, and video content (see col. 14, lines 5-19, application code).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-

3843. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner: Tongoc Tran

Page 11

January 19, 2006

SUPERVISORY PATENT EXAMINER